

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A vaccine composition, comprising vaccine antigen and an interferon α ~~and which wherein said composition~~ induces both vaccine antigen-specific antibody in blood and vaccine antigen-specific antibody secreted at the mucosal surface using vaccine antigen and adjuvant of said vaccine antigen by nasal mucosal-administration of said vaccine antigen and mucosal adjuvant at the same time ~~or at different times and by the same route~~.
2. (Currently amended) The vaccine composition according to claim 1, wherein the interferon α is ~~selected from~~ natural interferons α ~~and recombinant interferons α~~ .
3. (Original) The vaccine composition according to claim 1, wherein the amount of the interferon α used is 0.5 to 5,000,000 IU.
4. (Original) The vaccine composition according to claim 1, wherein the vaccine antigen is protein or peptide antigen.
- 5.-6. (Canceled)
7. (Currently amended) A mucosal adjuvant for inducing both vaccine antigen-specific antibody in blood and vaccine antigen-specific antibody secreted at the mucosal surface, comprising an interferon α as the active ingredient of said mucosal adjuvant and wherein nasal mucosal administration of said mucosal adjuvant is performed at the same time as ~~or at a different time than~~ said vaccine antigen ~~and by the same route as the administration route for said vaccine antigen~~.

8. (Currently amended) The mucosal adjuvant according to claim 7, wherein the interferon α is ~~selected from natural interferons α and recombinant interferons α .~~

9. (Original) The mucosal adjuvant according to claim 7, wherein the amount of the interferon α used is 0.5 to 5,000,000 IU.

10. (Currently amended) The mucosal adjuvant according to claim 7, wherein said vaccine antigen comprises a protein or peptide antigen ~~with which when a protein or peptide antigen is used as the vaccine antigen, mucosal administration is performed at the same time as or at a different time than the vaccine antigen and by the same route as said vaccine antigen.~~

11. (Cancelled)

12. (Cancelled)

13. (Currently amended) A combined product of a vaccine antigen and mucosal adjuvant for inducing both vaccine antigen-specific antibody in blood and vaccine antigen-specific antibody secreted at the mucosal surface, wherein said mucosal adjuvant comprises an interferon α as the active ingredient and nasal mucosal-administration of said mucosal adjuvant is performed at the same time as ~~or at a different time than said vaccine antigen and by the same route as the administration route for said vaccine antigen.~~

14. (Currently amended) The combined product according to claim ~~[[12]]~~13, wherein the interferon α is ~~selected from natural interferons α and recombinant interferons α .~~

15. (Original) The combined product according to claim 13, wherein the amount of the interferon α used is 0.5 to 5,000,000 IU.

16. (Original) The combined product according to claim 13, wherein the vaccine antigen is a protein or peptide antigen.

17. (Cancelled)

18. (Cancelled)

19. (Currently amended) A mucosal adjuvant for inducing both vaccine antigen-specific antibody in blood and vaccine antigen-specific antibody secreted at the mucosal surface, **wherein said mucosal adjuvant comprises** ~~comprising~~ an interferon α as the active ingredient.

20. (Canceled)

21. (Withdrawn) A mucosal immune response activation method, comprising administration of mucosal adjuvant containing interferon α as the active ingredient at the same time as or at a different time than the vaccine antigen and by the same administration route as the vaccine antigen to subjects in whom it is necessary to augment immunity by inducing both vaccine antigen-specific antibody in blood and vaccine antigen-specific antibody secreted at the mucosal surface.

22. (Withdrawn) A method of inducing both vaccine antigen-specific antibody in blood and vaccine antigen-specific antibody secreted at the mucosal surface using vaccine antigen and adjuvant of this vaccine antigen, comprising

- (1) mucosal administration of vaccine antigen,
- (2) the use of an interferon α as the active ingredient of the adjuvant,
- (3) administration of said adjuvant at the same time as or at a different time than said vaccine antigen, and
- (4) mucosal administration of said adjuvant by the same administration route as said vaccine antigen.

23. (Withdrawn) The method according to claim 22, wherein the interferon α is selected from natural interferons α and recombinant interferons α .

24. (Withdrawn) The method according to claim 23, wherein the amount of interferon α used is 0.5 to 5,000,000 IU.

25. (Withdrawn) The method according to claim 23, wherein the vaccine antigen is protein or peptide antigen.

26. (Withdrawn) The method according to claim 23, wherein mucosal administration is performed at the same time.

27. (Withdrawn) The method according to claim 26, wherein administration is via the nasal mucous membrane.

28. (New) The vaccine composition of claim 1, wherein the interferon α is recombinant interferon α .

29. (New) The mucosal adjuvant according to claim 7, wherein the interferon α is recombinant interferon α .

30. (New) The combined product according to claim 13, wherein the interferon α is recombinant interferon α .